

CLAIMS

1. A method for manufacturing a thin-film magnetic head comprising the steps of:

sequentially depositing a first magnetic layer, a non-magnetic layer and a second magnetic layer; and

forming a three-layer pole tip structure located between an air bearing surface and a position at a predetermined height from the air bearing surface by ion milling using no reactive gas said first magnetic layer, said non-magnetic layer and said second magnetic layer,

said non-magnetic layer being made of a material having an etching rate, for the ion milling using no reactive gas, equal to or higher than that of a material for making said first and second magnetic layers.

2. The method as claimed in claim 1, wherein a material for making said recording gap layer is one selected from a group of silicon dioxide, tantalum oxide, silicon carbide and aluminum nitride.

3. The method as claimed in claim 1, wherein a material for making said first and second poles is nitride containing iron.

4. The method as claimed in claim 1, wherein the material

for making said recording gap layer is tantalum oxide, and wherein the material for making said first and second poles is nickel iron.